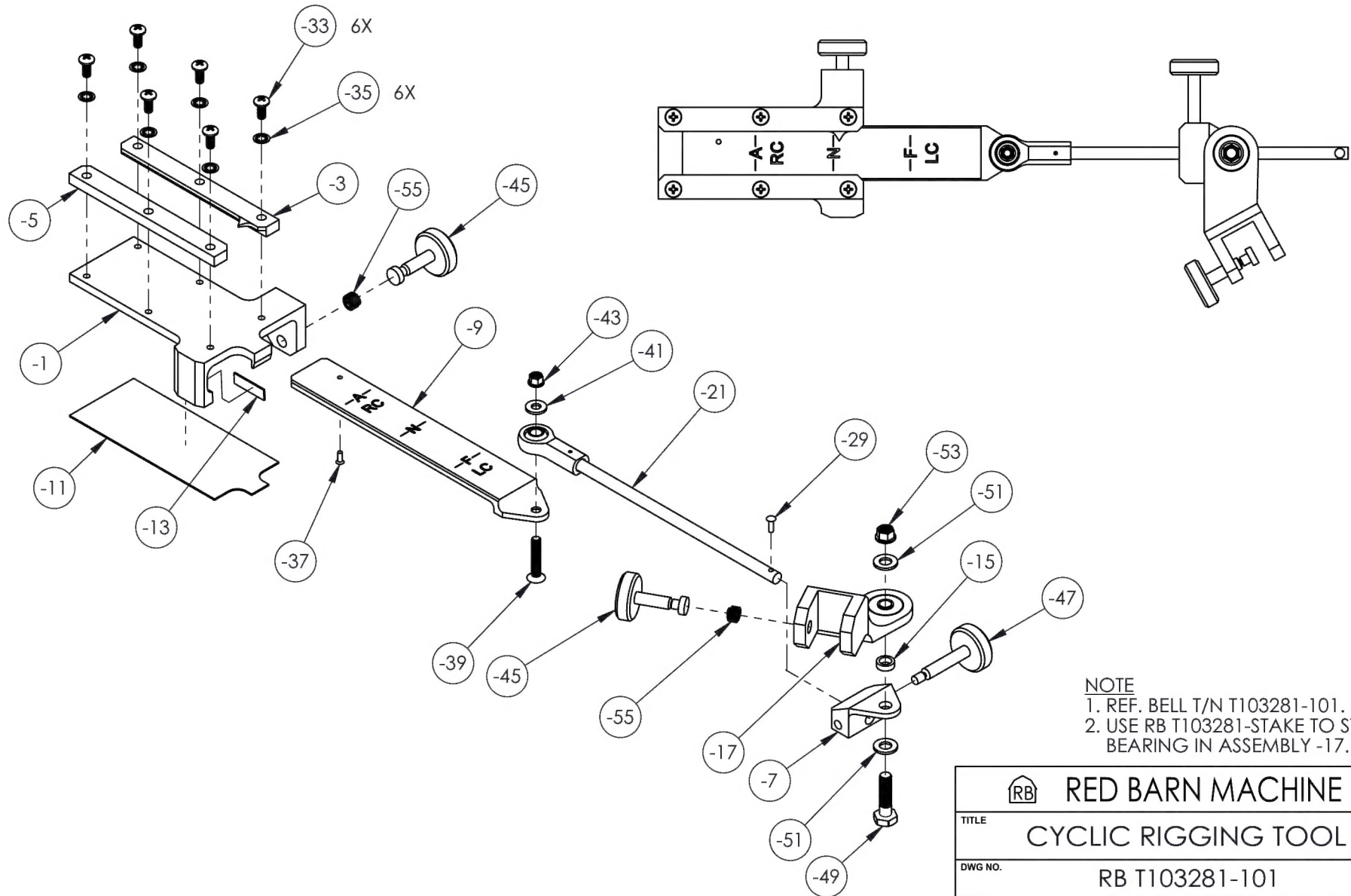


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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED



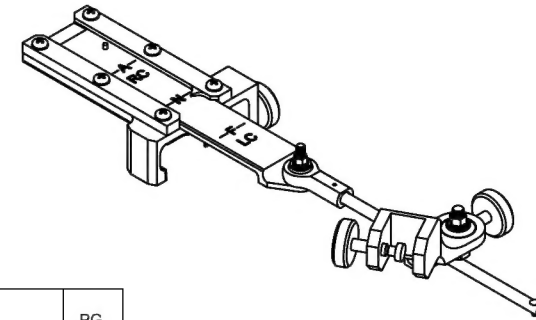
NOTE
1. REF. BELL T/N T103281-101.
2. USE RB T103281-STAKE TO STAKE BEARING IN ASSEMBLY -17.

RED BARN MACHINE	
CYCLIC RIGGING TOOL	
DWG NO. RB T103281-101	
REV	
MAT'L	
DRAWN BY: GILBERT	
APPROVED <i>D Weil</i>	
HEAT TREAT	
FINISH	
SPEC	
USED ON MODEL	
BELL 412	
SCALE 1:3	DATE 7/21/2011
SHEET 1 OF 13	


UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
.XXX ± .005 FRACTIONS ± 1/32
.XX ± .01 ANGLES ± 5°
.X ± .1
1. BREAK ALL SHARP EDGES .015 x 45°
OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER
PLATING

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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED

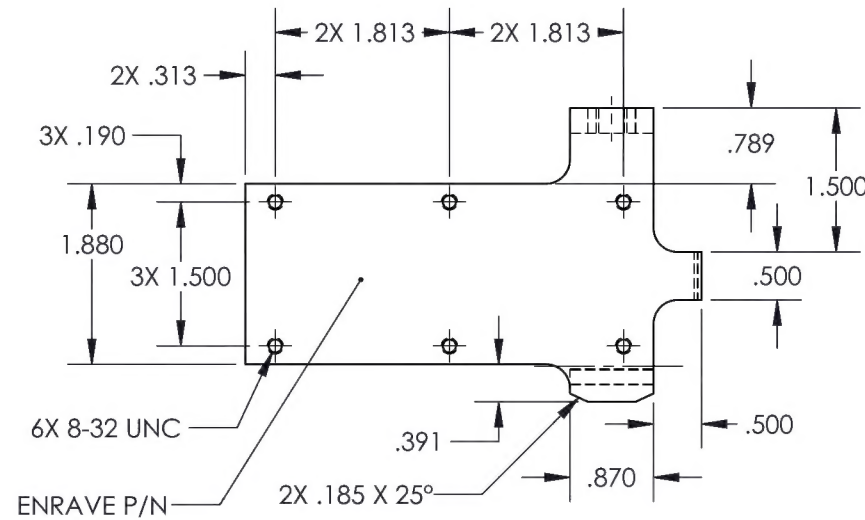
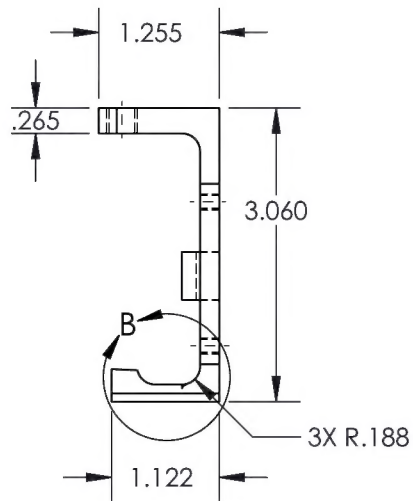
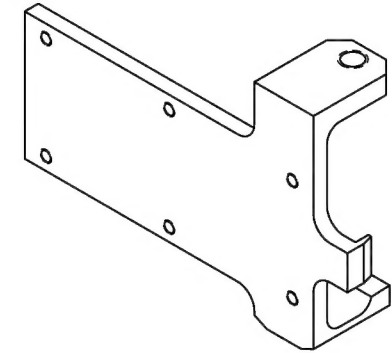
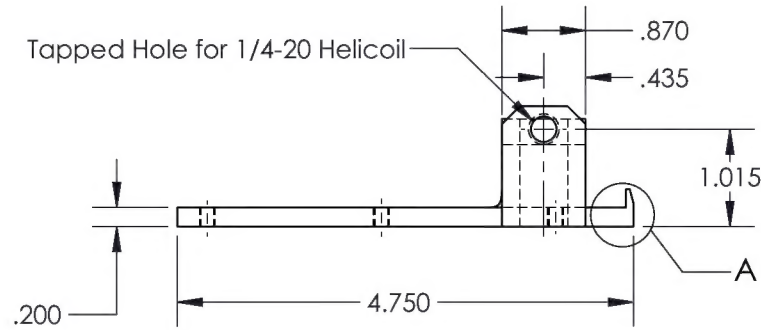


ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
			-1	1	BASE	6061	1-3/8 X 3-1/4 X 4-7/8	3
			-3	1	RAIL - POINTER	6061	3/8 X 5/8 X 4-3/8	4
			-5	1	RAIL	6061	3/8 X 5/8 X 4-3/8	5
			-7	1	ROD BLOCK	S.S.	7/8 X 1-3/8 X 1-1/2	6
			-9	1	SLIDE	6061	1/2 X 1-3/8 X 7-1/8	7
			-11	1	PAD	.030 NYLON M.D. (GREY) ADHESIVE BACKED	.030 X 2 X 4-3/4	8
			-13	1	SIDE PAD	.030 NYLON M.D. (GREY) ADHESIVE BACKED	.030 X 3/8 X 1	8
			-15	1	SPACER	DOM TUBE	Ø3/8 X .058 WALL X 1/4	9
	X		-17	1	BLOCK ASSEMBLY			10
	1		-19		ANGLE BLOCK	6061	1-1/2 X 2 X 3	11
X			-21	1	ROD ASSEMBLY			12
1			-23		ROD	1018	Ø1/4 X 6-5/8	13
1		B/O	-25		ROD END	STEEL	AIRCRAFT SPRUCE # REPB3N	12
1		B/O	-27		SPRING PIN	STEEL	Ø1/16 X 3/8 MCMaster-CARR #98296A023	12
		B/O	-29	1	RIVET	ALUMINUM	SPENCER AIRCRAFT #MS20470A3-5	1
1		B/O	-31		BEARING	STEEL	KSP-4-A FS428	10
		B/O	-33	6	SCREW	STEEL	8-32 X 3/8 MCMaster-CARR #90272A192	1
		B/O	-35	6	WASHER	STEEL	#8 MCMaster-CARR #91113A009	1
		B/O	-37	1	RIVET	ALUMINUM	SPENCER AIRCRAFT MS20470A3-4	1
		B/O	-39	1	SCREW	STEEL	10-32 X 1 MS24694-S58	1
		B/O	-41	1	WASHER	STEEL	#10 MCMaster-CARR #95229A380	1
		B/O	-43	1	NUT	STEEL	10-32 AIRCRAFT SPRUCE MS21042-L3	1
		B/O	-45	2	KNOB	STEEL	1/4-20 CARR LANE #CL-17-SHS	1
		B/O	-47	1	KNOB	STEEL	1/4-20 CARR-LANE #CL-2-SHS	1
		B/O	-49	1	BOLT	STEEL	1/4-28 X 1 AIRCRAFT SPRUCE NAS6604-9	1
		B/O	-51	2	WASHER	STEEL	1/4 MCMaster-CARR #95229A430	1
		B/O	-53	1	NUT	STEEL	1/4-28 AIRCRAFT SPRUCE MS21042-L4	1
		B/O	-55	2	HELICOIL	S.S.	1/4-20 X 1/4 HELICOIL MCMaster-CARR #91732A368	1
-21 ASSY	-17 ASSY							

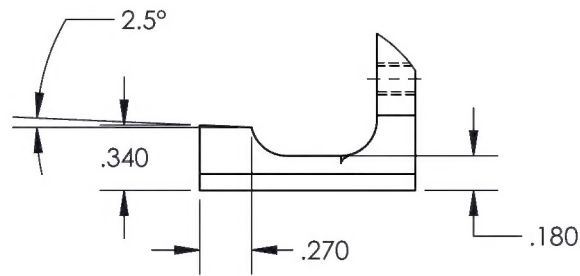
 RED BARN MACHINE		TITLE	
		CYCLIC RIGGING TOOL	
DWG NO.		REV	
RB T103281-101			
MAT'L		DRAWN BY: GILBERT	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		APPROVED <i>D Weil</i>	
.XXX ± .005 FRACTIONS ± 1/32		HEAT TREAT	
.XX ± .01 ANGLES ± 5°		FINISH	
.X ± .1		SPEC	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R		USED ON MODEL	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING		BELL 412	
SCALE 1:4	DATE 7/21/2011	SHEET 2 OF 13	

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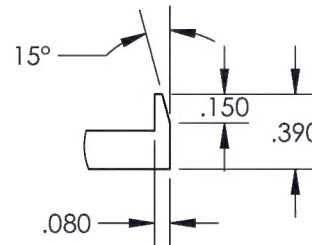
REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED



①
BASE



DETAIL B
SCALE 1 : 1

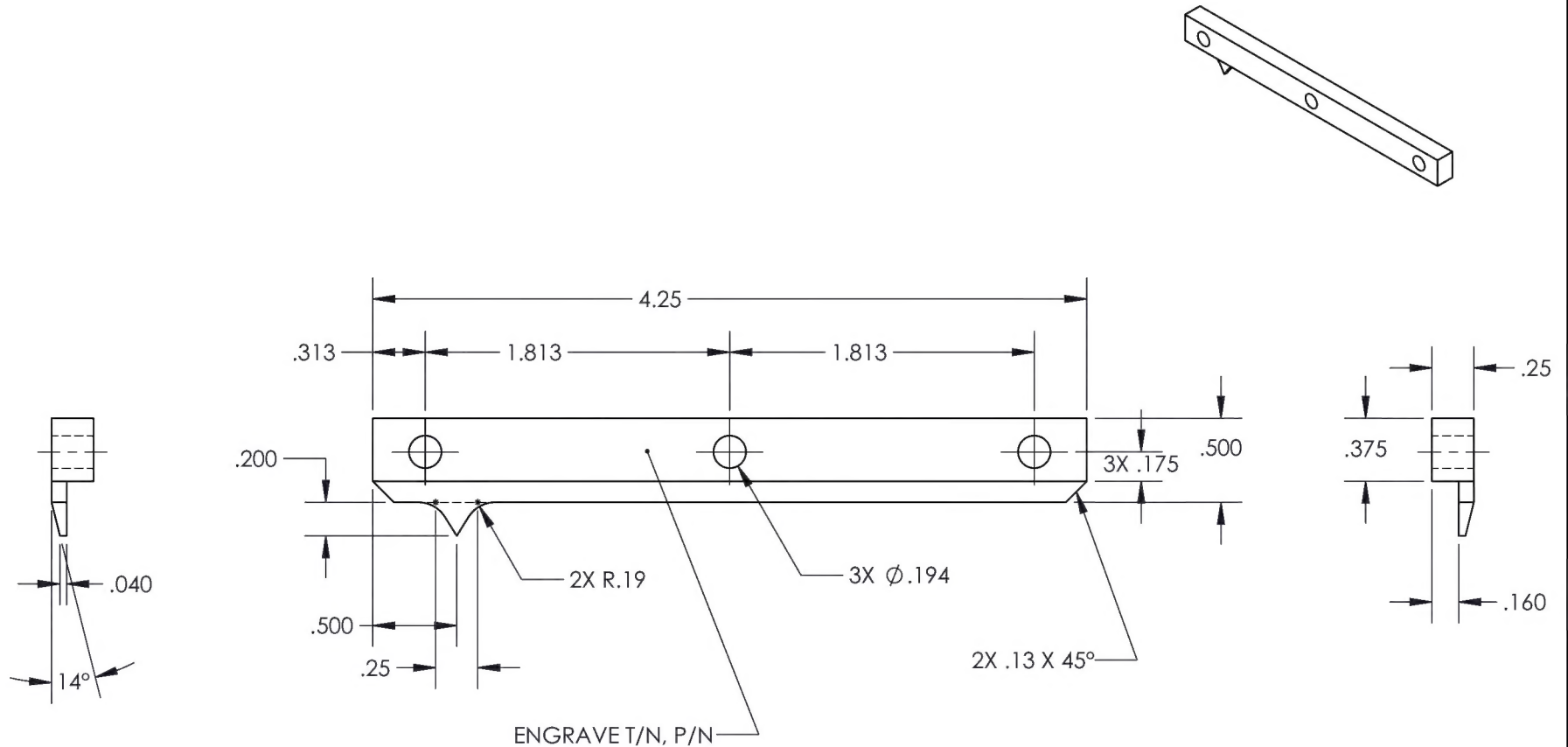


DETAIL A
SCALE 1 : 1

RED BARN MACHINE	
CYCLIC RIGGING TOOL	
TITLE	REV
DWG NO.	REV
RB T103291-101-1	
MAT'L 6061	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .005	HEAT TREAT
.XX ± .01	FINISH CLEAR ANODIZE
.X ± .1	SPEC MIL-A-8625F, TYPE II, CLASS I
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	BELL 412
SCALE 1:2	DATE 7/21/2011
SHEET 3 OF 13	


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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED



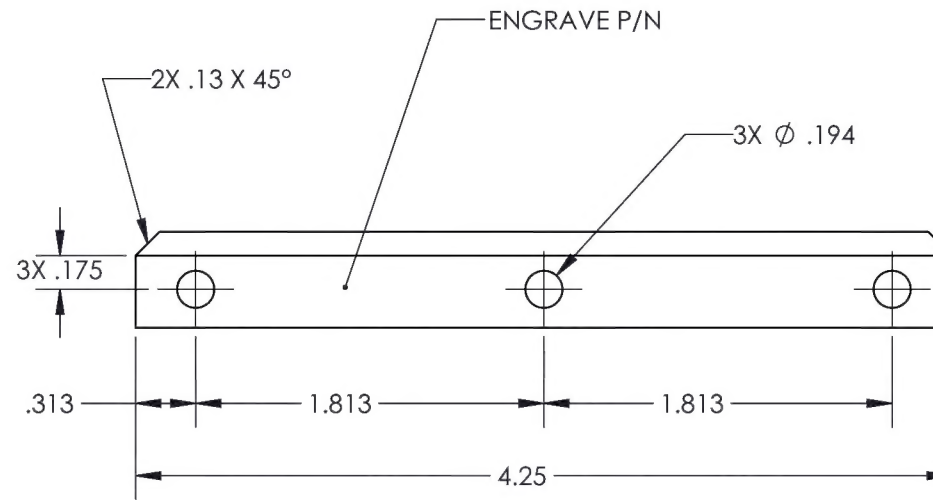
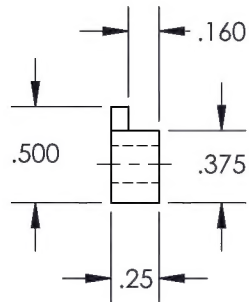
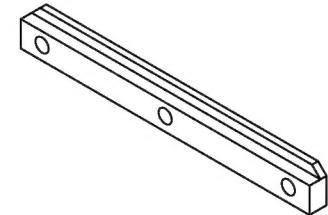
(-3)

RAIL - POINTER

 RED BARN MACHINE	
TITLE CYCLIC RIGGING TOOL	
DWG NO. RB T103281-101-3	REV
MAT'L 6061	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .005 FRACTIONS ± 1/32	HEAT TREAT
.XX ± .01 ANGLES ± 5°	FINISH CLEAR ANODIZE
.X ± .1	SPEC MIL-A-8625F, TYPE II, CLASS I
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	BELL 412
SCALE 1:1	DATE 7/21/2011
SHEET 4 OF 13	

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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED

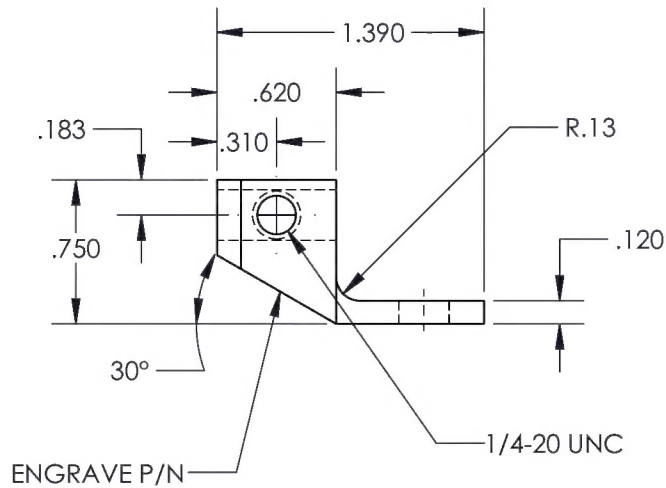
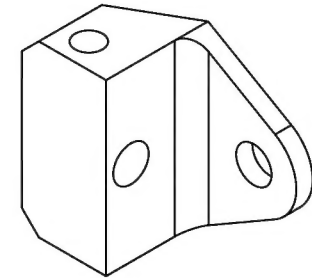
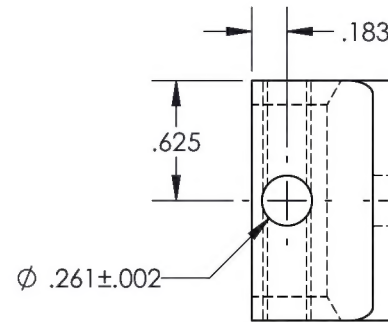
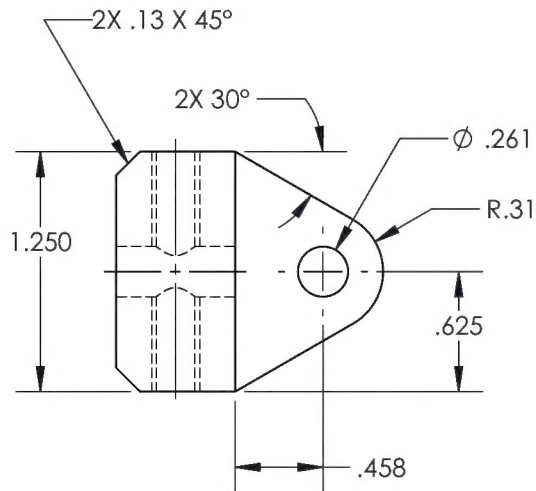


(-5)
RAIL

RED BARN MACHINE	
TITLE CYCLIC RIGGING TOOL	
DWG NO. RB T103281-101-5	REV
MAT'L 6061	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/32 .XX ± .01 ANGLES ± 5° .X ± .1	APPROVED <i>D Weil</i>
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	HEAT TREAT FINISH CLEAR ANODIZE
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	SPEC MIL-A-8625F, TYPE II, CLASS I
SCALE 1:1	USED ON MODEL BELL 412
DATE 7/21/2011	SHEET 5 OF 13


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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED



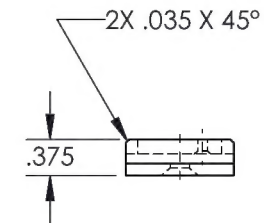
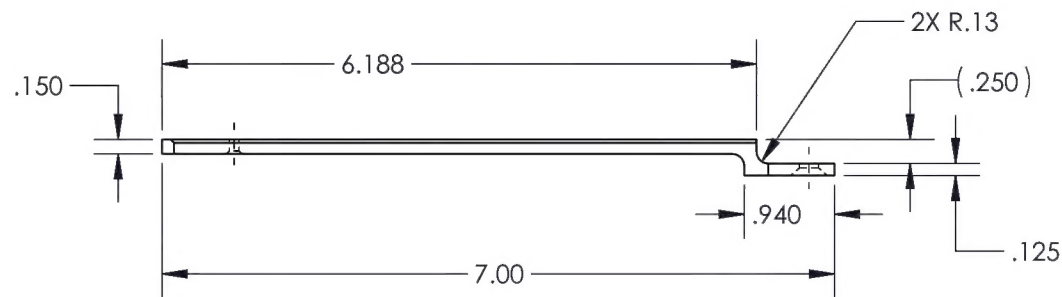
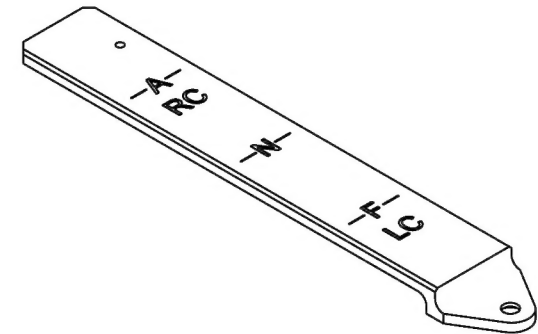
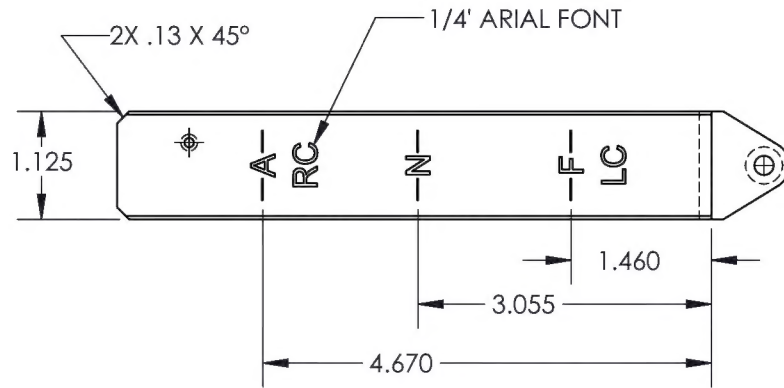
ENGRAVE P/N

-7
ROD BLOCK

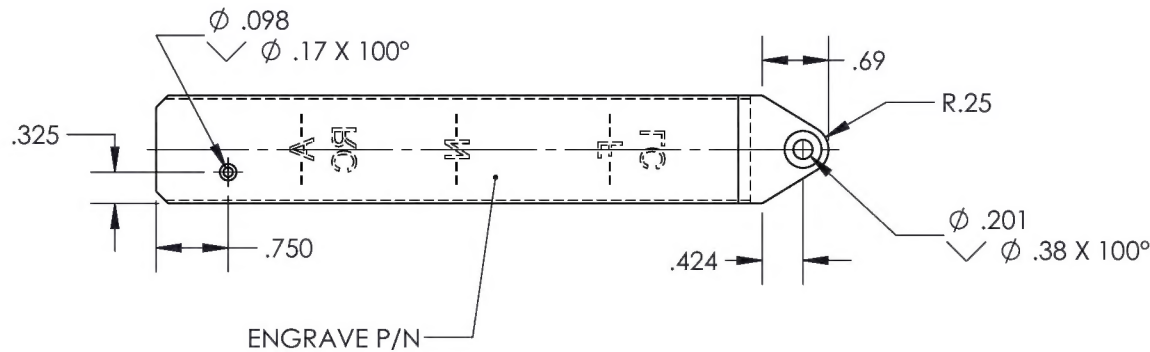
 RED BARN MACHINE	
TITLE CYCLIC RIGGING TOOL	
DWG NO. RB T103281-101-7	REV
MAT'L S.S.	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .005	HEAT TREAT
.XX ± .01	FINISH
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	BELL 412
SCALE 1:1	DATE 7/19/2011
SHEET 6 OF 13	

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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED



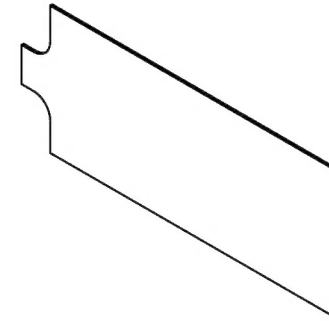
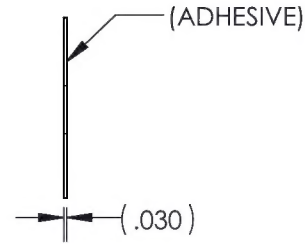
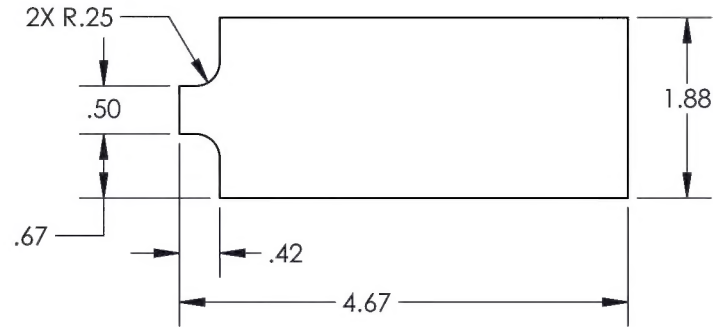
(-9)
SLIDE



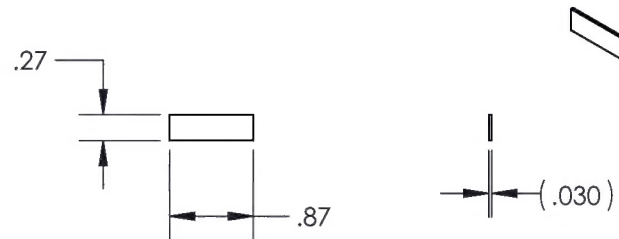
RED BARN MACHINE	
CYCLIC RIGGING TOOL	
TITLE	
DWG NO.	RB T103281-101-9
MAT'L 6061	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .005	HEAT TREAT
.XX ± .01	FINISH CLEAR ANODIZE
.X ± .1	SPEC MIL-A-8625F, TYPE II, CLASS I
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	BELL 412
SCALE 1:2	DATE 7/21/2011
SHEET 7 OF 13	

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(-11)
PAD



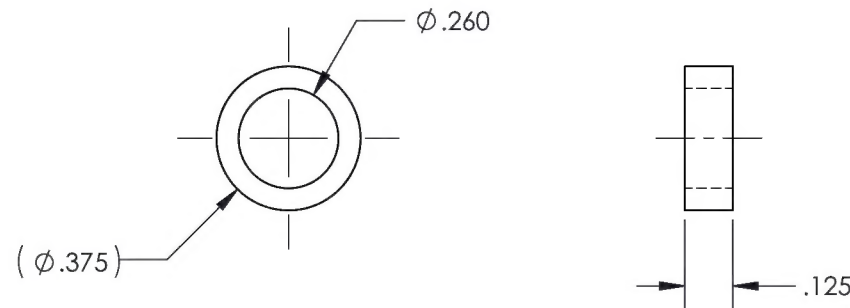
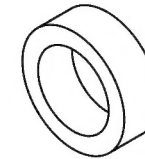
(-13)
SIDE PAD

NOTE
MATERIAL: .030 NYLON M.D. (GREY) ADHESIVE BACKED


RED BARN MACHINE	
TITLE CYCLIC RIGGING TOOL	
DWG NO. RB T103281-101-11 &-13	REV
MAT'L SEE NOTE	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .005	HEAT
.XX ± .01	TREAT
.X ± .1	FINISH
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	SPEC
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL
	BELL 412
SCALE 1:2	DATE 7/21/2011
	SHEET 8 OF 13

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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED

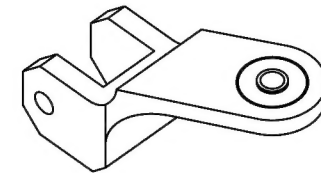
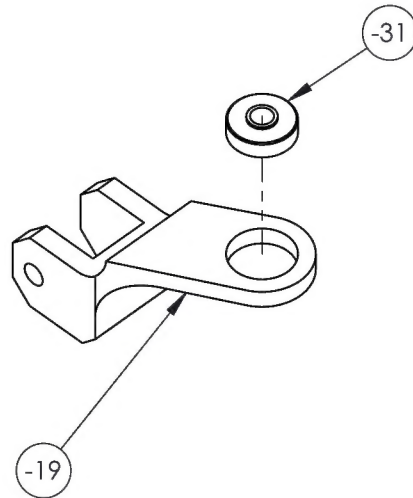


(-15)
SPACER

 RED BARN MACHINE	
TITLE CYCLIC RIGGING TOOL	
DWG NO. RB T103281-101-15	REV
MAT'L DOM TUBE	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/32 .XX ± .01 ANGLES ± 5° .X ± .1	APPROVED <i>D Weil</i> HEAT TREAT FINISH CAD PLATE YELLOW SPEC QQ-P-416F, TYPE II, CLASS II
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL BELL 412
SCALE 2:1	DATE 7/21/2011 SHEET 9 OF 13

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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED



NOTES:

1. PRESS BEARING -31 INTO ANGLE BLOCK -19, CENTERING BEARING IN ANGLE BLOCK.
2. USE TOOL RB T103281-STAKE TO STAKE BEARING IN PLACE, BOTH SIDES.

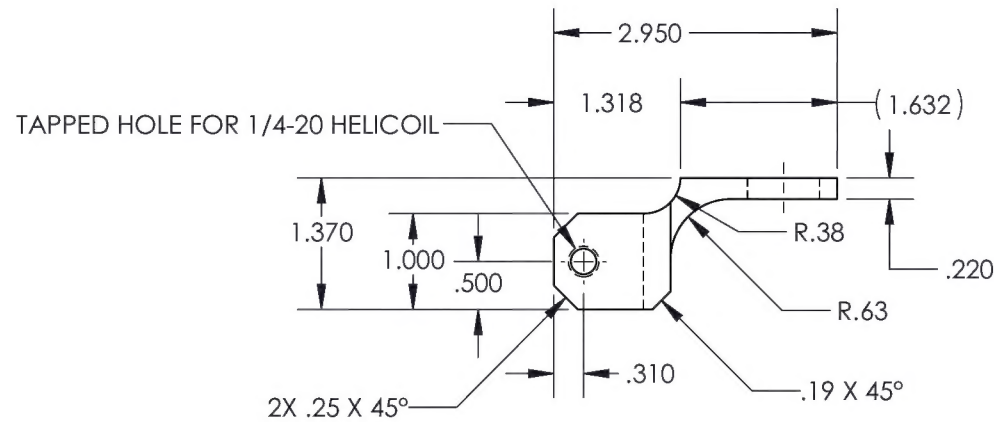
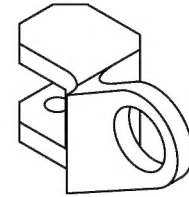
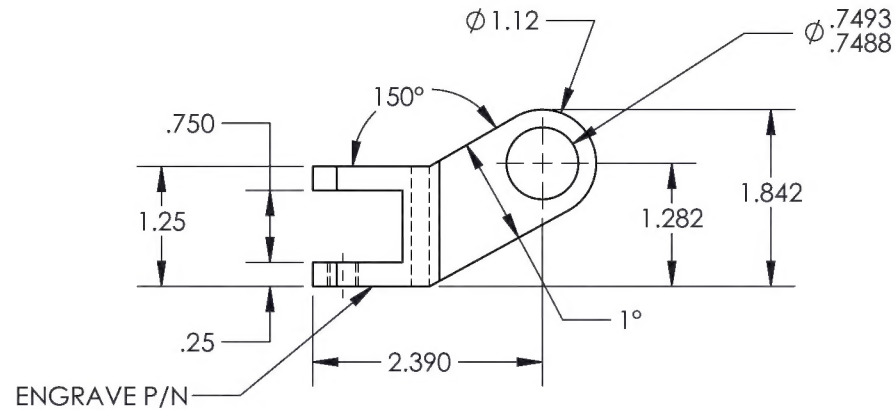
-17

BLOCK ASSEMBLY

RED BARN MACHINE	
TITLE CYCLIC RIGGING TOOL	
DWG NO. RB T103281-101-17	REV
MAT'L	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .005	HEAT TREAT
.XX ± .01	FINISH
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	BELL 412
SCALE 1:2	DATE 7/22/2011
SHEET 10 OF 13	

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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED



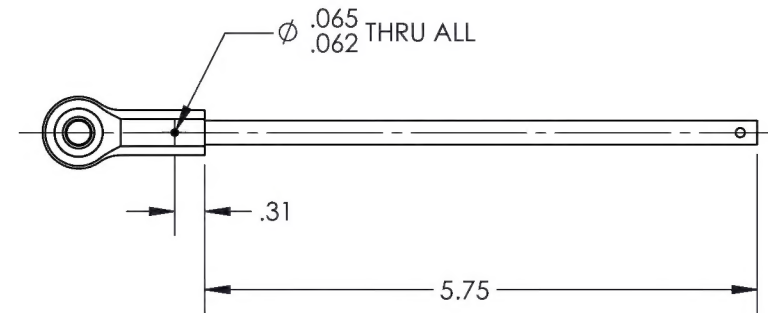
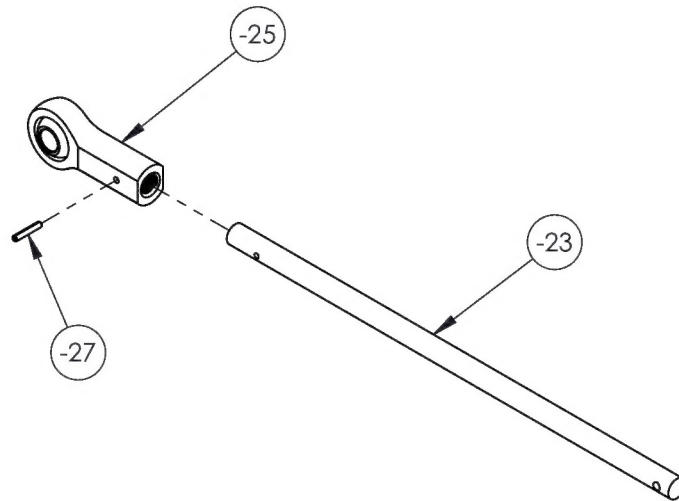
(-19)

ANGLE BLOCK

RED BARN MACHINE	
TITLE CYCLIC RIGGING TOOL	
DWG NO. RB T103291-101-19	REV
MAT'L 6061	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX $\pm .005$	HEAT TREAT
.XX $\pm .01$	FINISH CLEAR ANODIZE
.X $\pm .1$	SPEC MIL-A-8625F, TYPE II, CLASS I
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	BELL 412
SCALE 1:2	DATE 7/22/2011
SHEET 11 OF 13	


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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED



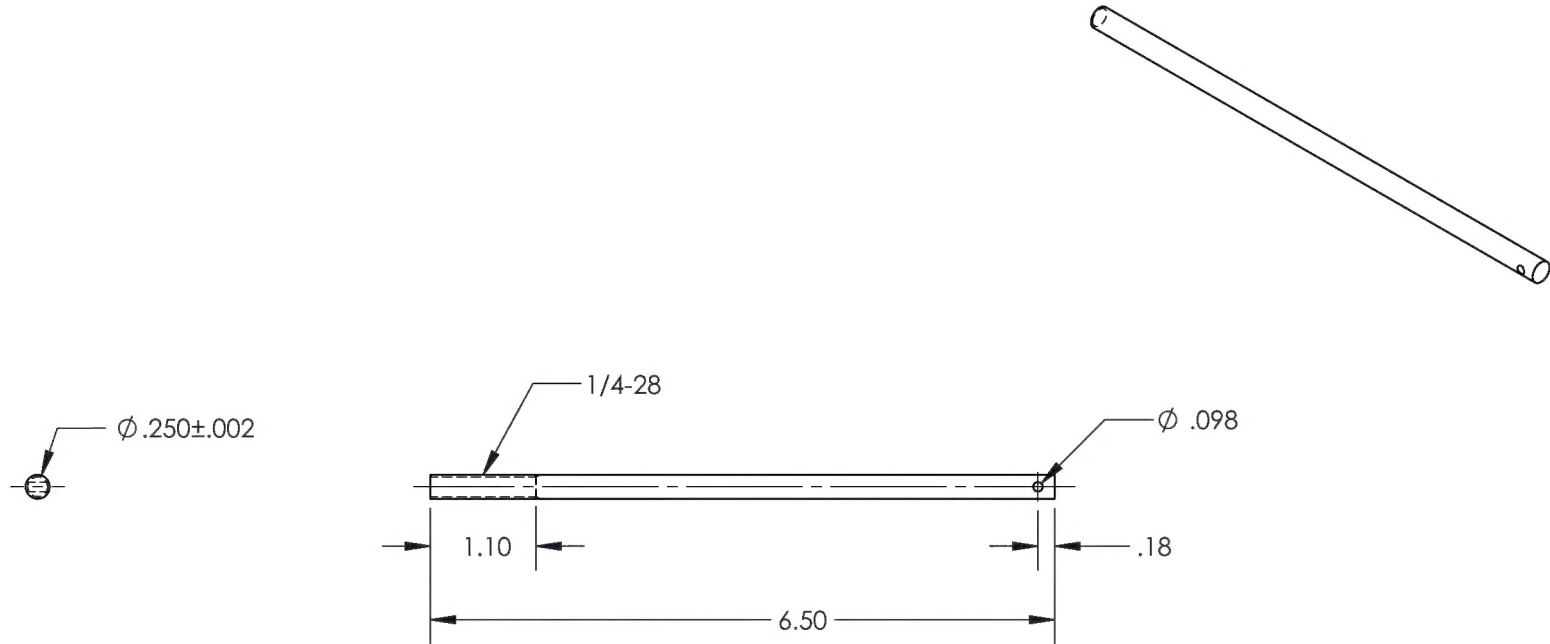
(-21)

ROD ASSEMBLY

 RED BARN MACHINE	
TITLE CYCLIC RIGGING TOOL	
DWG NO. RB T103281-101-21	REV
MAT'L	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .005	HEAT TREAT
.XX ± .01	FINISH
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	BELL 412
SCALE 1:2	DATE 7/22/2011
SHEET 12 OF 13	

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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED



(-23)
ROD

RED BARN MACHINE	
TITLE CYCLIC RIGGING TOOL	
DWG NO. RB T103281-101-23	REV
MAT'L 1018	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .005	HEAT TREAT
.XX ± .01	FINISH CAD PLATE YELLOW
.X ± .1	SPEC QQ-P-416F, TYPE II, CLASS II
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	BELL 412
SCALE 1:2	DATE 7/19/2011
SHEET 13 OF 13	